

June 28, 1842.

William Yarrell, Esq., Vice-President, in the Chair.

A Monograph on the Coleopterous family *Phyllophoridae*, by the Rev. F. W. Hope, was read. Following are the characters of the new species and genera contained in this paper.

Family PHYLLOPHORIDÆ, Hope.

Genus *Phyllophorus*, Hope.

Fœmina antennis filiformibus 11-articulatis, articulo 1^{mo} magno, externè crassiore, duobus proximis brevibus, 7 sequentibus gradatim increscentibus et ferè trigonis, ultimo autem ovale, apice parum minori. *Palpi* haud securiformes. *Caput* impressum, maxillis obtusis unidentatis. *Thorax* lateribus carinatis, angulis posticis subspinosus, anticis subrotundatis. *Elytra* thorace quintuplo longiora, sulcata et rugosa, lateribus elevatis.

Phyllophorus gigas. *Elater gigas*, Fab., Syst. Eleut.

Genus *Tetralobus*, Serville.

Tetralobus flabellicornis. *Elater flabellicornis*, Fab.

Tetralobus cinereus, Gory, Ann. de la Soc. Ent. de France, tom. i. p. 220. pl. 4. fig. 1.

TETRALOBUS GORYI. *Tetr. Mas, fusco-cinereus, capite ferè quadrato, anticè subexcavato, angulis anterioribus rotundatis. Thorax marginatus, valdè convexus, ad scutellum elevatus, utrinque depressus, angulis posticis obliquè acutis. Elytra thorace triplo longiora, posticè rotundata, lineis elevatis parum distinctis, tomentosa. Corpus infra piceo-cinereum, pectore pubescenti. Pedes tomentosi, femoribus compressis, tibiis subarcuatis, tarsisque flavo-membranaceis. Annuli abdominis utrinque foveolati.* Long. corp. $18\frac{1}{2}$ lin.; lat. $5\frac{1}{2}$ lin.

Hab. forsitan in Africâ.

Fœmina differt, long. 21 lin., lat. 6 lin.; antennis serratis, articulo ultimo tribus antecedentibus æquali, subacuto, abdomine multo convexiore.

A small variety of the above species exists in the rich cabinet of M. Dupont at Paris, and has been named by him *T. Sennarius*. It measures twenty lines in length, and differs also in the colour of its pubescence.

TETRALOBUS DUPONTI. *Tetr. nigro-cinereus, capite ferè quadrato, anticè excavato, tomentoso, angulis anticis rotundatis. Thorax convexus, subtilissime punctulatus haud foveis binis in medio im-*

pressus. Elytra thorace triplo longiora, ad suturam subacuminata, lineis vix distinctis. Corpus infrà piceum, tomentosum, binis ultimis annulis foveis, utrinque fortiter impressis. Pedes, femoribus, tibiisque compressis. Long. corp. 28 lin. ; lat. 9 lin.

In Musæo Dom. Dupont.

It is probable that the above species is from Africa. It was received by Mr. Dupont (in whose honour it is named) from a foreign traveller, who is lately dead. No locality is mentioned. The antennæ are imperfect.

TETRALOBUS SAVAGEI. *Tetr. totum corpus suprâ fusco-brunneum, aurantiisque capillis obsitum. Caput ferè quadratum, angulis anticis rotundatis, anticè excavatum. Thorax convexus, angulis posticis acutis. Elytra thorace duplo longiora, auratâque pubescentiâ tecta. Corpus infrâ abdomine piceo, pectore aurantiis capillis longis obsito, femoribus tibiisque piceis tarsisque infrâ auricomatis. Long. corp. 13 lin. ; lat. 4 lin.*

The above species I have much satisfaction in naming after an American clergyman, the Rev. T. S. Savage. His zeal in the collecting of insects in Western Africa has tended to add greatly to our stock of information regarding the entomology of those countries. Respecting the Goliath Beetles, he has in store for us many important observations, having collected them in the bush: his remarks on them may shortly be expected to arrive in this country.

Tetralobus Australasiæ. Gory, Ann. de la Soc. Ent. de France.

TETRALOBUS FORTNUMI. *Tetr. totum corpus fuscum, auratâ pubescentiâ tectum, antennisque pedibus ferrugineis, elytrisque suturâ acuminatis. Caput vix emarginatum punctatum, fronte foveâ anticè impressâ. Antennæ ferrugineæ. Fasciculus antennarum e lamellis novem rubro-ferrugineis. Thorax angulis anticis lateralibus, porrectis rotundatis; posticis acutis, disco varioloso-punctato, lineâque longitudinali parum impressâ. Scutellum posticè rotundatum. Elytra striato-punctata, striis punctis fortiter impressis, internè acuminata, externèque rotundata. Corpus infrâ atro-piceum aureo tomentosum, capillis pectoris longioribus. Pedes ferruginei, tarsi subtus pallidioribus et excavatis. Long. corp. 12 lin. ; lat. 3 lin.*

The above insect was lately sent to this country by Mr. Fortnum, from the new settlement of Adelaide, and although closely allied to *T. Australasiæ* of Gory, is yet distinct; it is the smallest species that has fallen under my notice, and has been named in honour of the above assiduous collector.

TETRALOBUS PARRYI. *Tetr. niger, capite ferè quadrato, antrorsum foveolato, angulis anticis parum rotundatis. Oculis flavis. Thorax latus punctulatus. Elytra thorace triplo longiora, depressa, striata, striis valdè distinctis. Corpus infrâ nigrum, segmentis abdominis utrinque foveolatis, pedibus piceis, antennis ferrugineis. Long. corp. 18 lin. ; lat. 6¼ lin.*

Hab. in Nubiâ. In Musæo Dom. Parry.

Captain Frederick Parry lately received this species in a box with

other Nubian insects. It is of a remarkably depressed form, approaching somewhat in this respect to *Tetralobus Goryi*, which latter insect, however, is certainly much more convex, and differs from it also in various other minor points.

TETRALOBUS MANGLESII. *Fœm. fusco-picea, antennis articulo primo concolore, reliquis ferrugineis. Caput ferè quadratum, punctatum, oculis rubris et nitidis. Thorax valdè convexus, angulis anticis rotundatis, posticis acutis, lined longitudinali mediâ, foveâ utrinque compressâ insignitus. Elytra vix acuminata, striato-punctata. Corpus infrâ rubro-piceum, antennis tarsisque ferrugineis. Long. corp. 17 lin.; lat. $4\frac{1}{4}$ lin.*

Hab. in Novâ Hollandiâ.

The above insect was sent to me by Capt. Mangles, the Egyptian traveller, in whose honour it is named. He received it from the vicinity of the Swan River.

Since the above was written, I have discovered the male in the collection of the Linnean Society, and the following is a concise description of it:—

Fusco-piceus, articulo primo nigricanti, reliquis ferrugineo flabellatis. Caput ferè quadratum, vix emarginatum. Thorax convexus, marginibus lateralibus subcarinatus. Scutellum valdè depressum. Elytra acuminata, substriato-punctata et sparsim punctulata. Corpus infrâ fusco-piceum, pectore auratâ pubescentiâ tecto, pedibus ferrugineis et auricomatis.

TETRALOBUS AURICOMUS. *Tetr. aureo-tomentosus, antennis flabellatis nigris, thorace posticè producto, elytris thorace triplo longioribus, auricomatis, apicibus rotundatis. Corpus infrâ aureo-tomentosum, pedibus concoloribus. Caput anticè rotundatum, fronte subfoveolatâ. Antennæ articulo 1^{mo} inæquali elongato subsecuriformi, 2^{da} et 3^{tio} minutis, reliquis trigono-ramosis, ultimo sublongo compresso, apice emarginato. Thorax anticè rotundatus, convexus, in medio disci foveâ utrinque impressâ, angulisque posticis acutis. Elytra auricomata vix sublineata. Corpus infrâ tomentosum, annulis abdominis utrinque subimpressis. Long. corp. 12 lin.; lat. $3\frac{5}{8}$ lin.*

In Musæo Dom. Guerin.

Hab. in Africâ.

Since the above description was written a more exact locality has been given me.

Hab. “Le fort de Sedou, au bord de la rivière Casamance, découvert par M. le Capitaine Mion.”

TETRALOBUS ROBUSTUS. *Fœm. flavo-fusca, antennis valdè compressis. Caput anticè excavatum, flavisque capillis obsitum. Thorax convexus, angulis anticis rotundatis, posticis acutis. Elytra striata, ad apicem dehiscentia, subacuta. Corpus infrâ flavofuscum, pectore aurato tomento obsito pedibusque concoloribus.*

From the remarkable compressed antennæ I am inclined to consider this insect, which was received from the island of Madagascar,

as the type of a distinct genus. The following characters may be deemed sufficient to mark its peculiarities, which are chiefly taken from the antennæ, and hence it has been named

*Piezophyllus**.

Caput rotundatum, *antennis* valdè compressis, undecim articulatis, articulo 1^{mo} crasso, 2^{do} brevi, octo sequentibus gradatim decrescentibus, ultimo apice acuto. *Thorax* angulis anticis rotundatis, posticis acutis. *Elytra* subacuminata e suturâ dehiscentia lateribus medio subsinuatis. *Pedes* robusti, *tibiis* subincurvis.

Other peculiarities might be mentioned; but as it is well-figured, however, its other characters may easily be distinguished.

PIEZOPHYLLUS SHUCKHARDI. *Tetr. atro-piceus*, capite ferè quadrato, anticè parum excavato, angulis anticis subobliquè truncatis antennisque ferrugineis. *Antennæ* articulo 1^{mo} ferè trigono, crasso, 2^{do} 3^{tio} brevibus, 7 sequentibus lamelligeris; *antennis* capite thoraceque æqualibus. *Thorax* valdè convexus, lateribus carinulâ insignitis, angulisque posticis subacutis. *Elytra* sulcata. *Corpus* infrâ atro-piceum, pectore hirsuto, flavisque capillis longis obsito. *Pedes* picei, auricomi, femoribus tibiisque subcompressis. Long. corp. 24 lin.; lat. 7 lin. ♀ Long. corp. 21 lin.; lat. 7 lin.

I am indebted to Mr. Shuckhard for the above insect, and the species is most probably the *Tetralobus Dumolinii* of Dupont's cabinet. The antennæ and tarsi of this specimen were in too imperfect a state to describe.

PIEZOPHYLLUS SPENCEI. *Tetr. niger*, *antennis* fusco-piceis, articulo primo nigricante. *Caput* ferè quadratum, anticè excavatum. *Thorax* robustus, valdè convexus, lineâ longitudinali impressâ foveâque utrinque insignitus et creberrimè punctulatus, angulis posticis ferè rectis et acutis, carinulâ abruptè interruptâ. *Elytra* ad apicem dehiscentia, subacuta. *Corpus* infrâ atrum, pectore auricomato pedibusque concoloribus. Long. corp. 16 lin.

Hab. in agro Senegalensi.

This singular insect is described from the rich cabinet of Monsieur Dupont in Paris, and it appears to belong to the same subgenus as *Tetr. Shuckhardi*. The same insect I have seen before, and as it was named after Mr. Spence, the celebrated entomologist, I have retained that name.

Oxynterus† *mucronatus*. *Elater mucronatus*, Olivier.

Olivier suspects that this insect is the female figured by Voet (vid. Coleop. tab. 45. fig. 34.); it was originally described from the cabinet of the Prince of Orange, and certainly differs from the *Flabellicornis* of Drury, which Olivier seems to doubt. The following short Latin characters separate it at once from *Tetralobus*.

* *Piezophyllus*, from πίεζω *premo*, et φύλλον *folium*.

Genus *Oxynteris**, Hope.

Caput anticè submarginatum, antennis ♂ apicibus flabellatis elytrisque in utroque sexu acuminatis. *Thorax* angulis anticis ferè rotundatis, posticis acutis. *Elytra* striata et mucronata, pedibus veluti in *Tetralobo*.

Each joint of all the tarsi is clothed beneath with a row of short golden-coloured plush, as in other species belonging to this genus.

OXYNTERIS AUDOUINI. *Oxyn.*, *Mas*, *brunneo-cinereus*, *capite fortiter excavato, parum tomentosio*. *Thorax emarginatus, posticè subsinuatus, anticè aurantiis capillis obsitus, depressus*. *Scutellum rotundatum*. *Elytra brunneo-cinerea, parum tomentosa*. *Corpus infrà nigro-cinereum*. *Pedes concolores, femoribus tibiisque compressis, tarsisque piceis*. Long. corp. 62 lin. ; lat. 23 lin.

The above species was described by me, during my late residence in Paris, from the collection at the Jardin des Plantes. It is named in remembrance of the late Professor Audouin, who succeeded to the entomological chair held by the celebrated Latreille. The locality was not stated ; I believe it, however, to be from the East Indies, although I cannot actually specify its real locality. It seems to differ considerably from *mucronatus* of Olivier.

OXYNTERIS CUMINGII. *Oxyn. fusco-flavus, antennis ferrugineis*. *Caput clypeo rotundato atro, medio disci subsulcato*. *Thorax fuscus, marginibus elevatis, angulis anticis parum productis, posticis acutis et extùs divergentibus*. *Scutellum posticè rotundatum atrum*. *Elytra acuminata fusco-flava, tribus lineis parùm elevatis insignita*. *Corpus infrà atro-piceum, femoribus concoloribus*. *Mesosternum fortiter excavatum, cornu aprosterni ad medios pedes porrecto*. Long. corp. 36 lin. ; lat. 11 lin.

Fœmina magnitudine differt, thorace etiam paullo latiore antennisque compressis.

The light castaneous appearance of the elytra of the above insect must in a great measure be attributed to abrasion : when recently captured it was remarkable no doubt for a golden pubescence above and beneath, which is a characteristic of other allied species. The above magnificent species is named in honour of Mr. Cuming the conchologist, whose important discoveries at Manilla in various branches of zoology entitle him to the thanks of the naturalists of England. It may be mentioned with regard to the above insects, that the joints of all the tarsi are clothed with a row of short golden-coloured plush ; the head and thorax are covered also with very short gray pile, and in the male the elytra are fulvous red, whilst in the female they are saturated on the disc with brown ; the latter sex is also a quarter of an inch larger than the male. It is also worthy of notice that the joints of the antennæ to which the leaflets are attached gradually increase after the third joint, the extreme being the most marked.

* From *ὄξυς*, *acus*, and *πτερόν*, *penna*.

OXYNOPTERUS LATIPENNIS. *Nigro-fuscus, antennis concoloribus, elytris acuminatis et piceis. Caput ferè quadratum, anticè excavatum rugoso-punctatum. Thorax latus, angulis anticis vix productis, posticis acutis, lateribus marginibus elevatis. Elytra atro-picea tomentosa, apicibus acutis. Corpus infrà nigrum, pedibus ferrugineis.* Long. corp. 24 lin. ; lat. 8 lin.

Hab. in Africâ.

The above species was received by me in a box of insects from the Cape of Good Hope : for some time I was induced to regard it as an Asiatic species, but since I have lately received a species nearly similar in form from Sierra Leone, it may be an African insect. It is remarkably broad for a male ; the disc of the thorax also is slightly convex. A label attached to it has 'Gold Coast' written on it.

In Musæo Dom. Hope.

Fœmina adhuc latet.

OXYNOPTERUS JAVANUS. *Oxyn. fusco-flavus et aureo-tomentosus, antennis ferrugineis. Caput atrum, antennis thorace ferè duplo longioribus. Thorax anticè emarginatus, angulis utrinque productis, posticis acutis et divergentibus. Elytra acuminata fusco-picea aurato-tomentosa. Corpus infrà nigrum, pedibus nigricantibus tomento suprâ aspersis, tarsisque auricomatis.* Long. corp. 23 lin. ; lat. 7 lin. ♀ Long. corp. 28 lin. ; lat. $8\frac{1}{4}$ lin.

Fœmina differt antennis compresso-serratis et fuscis.

Hab. in insulâ Javæ.

The above insects, male and female, were brought to this country by Dr. Horsfield from the island of Java ; at first I was inclined to consider the species as the *mucronatus* of Olivier, but the figure in Voet is quite different. I have no hesitation in recording it as another species, and it may be remarked here that the above insects are in a good state of preservation, and that all the species of flabellate Elaters with pubescence should be described immediately they are captured, as when dead they change considerably in colouring, often turning black and greasy, so that it is impossible accurately to describe them as in their original state.

LEPTOPHYLLUS STRACHANI. *Lept. (Mas) piceus, capite anticè excavato antennis, capite cum thorace ferè duplo longioribus, elytris acuminatis. Caput ferè quadratum, anticè excavatum rugosum, antennæ thorace duplo longiores, lamellis elongatis et ferrugineis. Thorax undique marginibus elevatis conspicuis, angulis anticis parùm productis, obtusis, posticis acutis et extis divergentibus. Elytra valdè acuminata marginata picea et aurato-tomentosa. Corpus infrà concolor, femoribus tibiisque compressis. Fœmina adhuc latet.* Long. corp. 26 lin. ; lat. 7 lin.

The above species was brought to this country by Mr. Strachan, long time a resident at Sierra Leone. His zeal in urging his friends to collect insects in that climate has been the means of considerably enriching our metropolitan collections, and to him chiefly we are indebted for our acquaintance with the Goliath beetles. I have named

the insect above described in honour of this gentleman, who has exhibited such a remarkable zeal in favour of zoology. When his health declined in consequence of the bad climate, he yet made arrangements with his friends for enriching our collections at home. He returned to England, after resigning his laborious situation, broken in health but unsubdued in spirits, and hence we may hope that his health will shortly be re-established. The following characters appear to me sufficient to form into a subgenus, allied to *Oxynterus*, the above insect which I have denominated *Leptophyllus*, from the long leaflets which compose the antennæ.

*Leptophyllus**, Hope.

Caput ferè quadratum, anticè emarginatum. *Antennæ* 11-articulatæ, 1^{mo} magno, 2^{do} subtrigono, octo sequentibus ferè æqualibus et lamellatis, undecimo triplo majori. *Thorax* angulis anticis rotundatis, posticis acutis, lateribus marginatis et carinatis. *Elytra* posticè acuminata, pedibus unguibus ferè æqualibus.

The anatomical sections of this genus are so fully figured by Mr. Westwood that there is no necessity for more ample details, as they may be detected on reference to the plate.

Pectocera†, Hope.

Caput fortiter emarginatum. *Antennæ* valdè pectinatæ, novem ultimis articulis, dentibus gradatim increscentibus, ultimis longissimis. *Thorax* anticè rotundatus, angulis posticis acutis. *Elytra* acuminata, pedibus simplicibus.

The remaining characters may easily be seen in the accompanying plate. It appears to me that the above genus is mediate between *Tetralobus* and *Ludius* and *Ctenicera*.

PECTOCERA CANTORI. *Pect. fusco-castanea, antennis valdè pectinatis brunneis. Thorax niger tomentoque aureo aspersus. Elytra fusco-castanea, apicibus acuminatis. Corpus infrà pilosum, cinereis flavisque capillis obsitum. Segmenta abdominis utrinque brunneo-maculata, maculis glabris. Long. corp. 10 lin.; lat. 2¼ lin.*

Hab. in agro Assamensi.

The above insect I received from Dr. Cantor before he quitted England, and I have since received it from the Khasyah Hills: it is named in honour of the above zealous naturalist.

PECTOCERA MELLII. *Flavo-fusca griseoque variegata, antennis pectinatis. Thorax angulis posticis acutis, subtomentosus. Elytra posticè valdè acuminata, pedibusque fusco-flavis et pubescentibus. Long. corp. 12¼ lin.; lat. 3 lin.*

Hab. circa Semlaa in agris Thibetianis. E Musæo Dom. Melly descriptus.

* From λεπτός *tenuis*, and φύλλον *folium*.

† πεκτός or πηκτός *combed*, and κίρας *horn*, in short, comb-horned antennæ.